

FIRST PRINCIPLES

OF

PHILOSOPHY.

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FIRST PRINCIPLES

OF

PHILOSOPHY.

For the use of STUDENTS.

BY

R

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EDINBURGH:

Printed for WILLIAM CREECH.

Sold, in London, by T. CADELL.

MDCCLXXX.



THE First - Philosophy
or Logic Class, in the
University of Edinburgh, is
placed, in the Academical
course, immediately after
the study of the Languages.

Logic was originally form-
ed, and, in a great degree,
has continued, an Art with-
out Science. The trea-
tises on this subject (Lord
Bacon's excepted) have been
limited to commentaries on

the Ancient Systems, or to detached essays on Metaphysics and Criticism. Hence the present imperfect state of this Art, compared with the other branches of Knowledge.

To remedy this defect, the method of observing and applying the Laws of Nature, is to be explained, as forming a Science of Logic, which may serve as the Rudiments and First Principles of all Philosophy.

The

The outlines only of the Lectures are printed. They are intended chiefly for the Students who are to hear them explained.

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FIRST

FIRST PRINCIPLES
OF
PHILOSOPHY.

INTRODUCTION.

I.

Of Philosophy.

I.

Origin and Object of Philosophy.

PHILOSOPHY is derived from the observation of Nature.

Its object is to examine the properties and relations of her
A works,

works, and to discover the laws which they follow.

The character of its subjects necessarily determines its general departments.

2.

General departments of Philosophy.

LOGIC, or General Philosophy ; which treats of the method of observing, and applying the laws of Nature.

PHYSICS; which treat of the laws of material objects.

ETHICS; which treat of the actions of mankind.

The subdivisions in these departments are termed sciences.

3.

Sciences.

The knowledge of the laws of nature, in any general or particular department, constitutes a science.

There are many general terms which must be explained, as the language of all the sciences:——

Phenomenon,

Effect and Cause,

Philosophical Arrangement,

Induction,

Law of Nature,

Principle,

Theory,

Hypothesis,

&c.

The end of Science is to create,
and to improve, the Arts.

4.

Arts.

An Art is the application of the
laws of Nature to some useful pur-
pose in life : ———

Fine.

Mechanical.

Liberal.

II.

II.

Of the First Principles of Philosophy.

I.

Object of the First Principles of Philosophy.

The object of the First Principles of Philosophy is to explain the method of discovering the laws of Nature, by observation of phenomena, and of applying these laws to the useful and elegant Arts.

The First Principles of Philosophy divide themselves into two parts : —

A 3

The

1. The method of observing and studying Nature.
2. The application of this method to the proper subjects of Philosophical knowledge.

2.

General Arrangement.

PART FIRST comprehends the following Sciences :

1. PNEUMATOLOGY; or, The History of the Powers and Faculties of the Human Mind.

2. LOGIC; or, The method of directing our faculties in observing and applying the laws of Nature.

3. METAPHYSICS; or, An analysis

nalysis of the foundations of the
other Sciences and Arts.

PART SECOND comprehends the
following Articles :

1. APPLICATION of the First
Principles of Philosophy to the
study of Nature.

2. The HISTORY of Philoso-
phy.

FIRST

FIRST PRINCIPLES
OF
PHILOSOPHY.

PART I.

General Arrangement.

THE First Principles of Philosophy direct to the method of observing and studying Nature.

The study of Nature requires a knowledge of the faculties of observation, of the method of directing them, and of the general characters of the phenomena they are to discover.

The

The sciences of Pneumatology, Logic, and Metaphysics, furnish these requisites.

• They are the natural introduction to the study of the other sciences and arts.

I.

PNEUMATOLOGY.

INTRODUCTION.

I.

Nature and Progress of the Science.

The science of Pneumatology arises from the natural history of the powers and faculties of the human mind.

They are the instruments employed in the observation of the phenomena and laws of Nature.

Progress of the science —

— among the ancients.

— among the moderns.

2.

Arrangement.

Pneumatology comprehends an analysis of the following articles.

1. The general phenomena of mind, as a department of Nature, distinct from body.

2. The sources of Human Knowledge : — Sensation, — Understanding, — Consciousness.

3. The Will.

4. The Moral Faculty.

5. The Emotions, Passions, and Affections.

6. The Reflex Senses.

7. Theory of the Mind.

CHAP.

CHAP. I.

Of Mind as a department of Nature.

SECT. I.

Distinctions in Nature.

The first effort of observation distinguishes the works of Nature into the classes of Body or Matter, and of Mind or Intelligence.

Matter exhibits primary and secondary qualities : —

Solidity, Extension, &c.

Heat, Cold, &c.

Mind is characterised by obvious and general attributes : —

Consciousness, Volition, &c.

B

SECT.

S E C T. II.

Distinctions in Science.

The departments of Matter and Mind furnish subdivisions, which become the subjects of particular Sciences :

Body : —

Mechanics.

Chymistry.

Physiology.

Mind : —

Pneumatology.

Natural Logic.

Ethics.

Natural Theology.

S E C T.

S E C T. III.

Principles.

Mind and Body have different laws.

The phenomena and laws of the one, do not explain the phenomena and laws of the other.

They are different departments in Nature.

Review of the hypotheses on these subjects.

CHAP. II.

Of the sources of Human Knowledge.

The sources of Knowledge in the Human Mind can be discovered only from the Natural History of Phenomena.

They may be analysed under the titles of Sensation, Understanding, Consciousness.

SECT. I.

Sensation.

The intimations which the Human
man

man Mind receives from the impression or agency of objects external to itself, are usually termed *Sensations*.

Sensations are accompanied with perceptions of objects, and of their relations.

Natural History and Physiology of Sensation as external and internal.

The particular distinctive sensations are five: Touch, Tasting, Smelling, Hearing, and Seeing.

Touch.

Natural History and Physiology of the organ and medium of Touch.

General characters of the distinctive sensations and perceptions of Touch.

Tasting.

Natural History and Physiology——

—of the organ and medium
of Tasting.

—of the sensations and percep-
tions of Tasting.

Smelling.

Natural History and Physiology——

—of the organ and media of
Smelling.

—of the sensations and percep-
tions of Smelling.

Hearing.

Hearing.

Natural History and Phyiology——

—of the Ear.

—of the Voice, as articulate and inarticulate.

Analysis——

—of the more general media of Sound.

—of the principles on which the production and propagation of Sounds depend.

—of Reflected Sounds.

—of the Velocity of Sounds.

—of the sensations and perceptions of Hearing.

The pleasure from Sounds arises from their connection with the Passions and Imagination.

The phenomena which excite
this

this pleasure are the foundations of the art of Music.

Seeing.

Natural History and Physiology —

— of the Eye.

— of the variations from its ordinary structure.

Analysis —

— of Light, the medium of Vision.

— of the sensations and perceptions of Seeing, as proper and acquired.

The pleasures of Sight are connected with the Passions and Imagination.

The phenomena which excite and continue these pleasures, are the

the foundations of several of the Arts.

The independent existence of the objects of our Sensations has been questioned.

Origin and effects of this scepticism.

S E C T II.

The Understanding.

The Understanding is a general expression, denoting the powers and faculties of the human mind which are employed in the attainment of knowledge.

It is characteristically different from Sensation.

Its

Its offices are, to observe, to compare, and to arrange phenomena, and to infer what are the laws of Nature.

Its powers seem to have a natural succession and dependence on each other.

They may be delineated under the titles of Memory, Abstraction, Imagination, Intuition and Reasoning, and Judgement.

Physiologists term Memory, Imagination, and Judgement, internal senses.

Memory.

The power of recalling our past perceptions.

Analysis of the relations by which the memory is aided.

The observation of these relations forms artificial memory.

Abstraction

Abstraction.

The power of considering objects, or the qualities of objects, apart from the other objects and qualities with which they are found to be connected in nature.

Abstraction is the source of arrangement, generalization, science, and theory.

Imagination.

The power of assembling objects, qualities, and circumstances, and forming them into a new aggregate, whether fictitious or real, by a different combination.

Imagination borrows from the preceding faculties of memory and abstraction.

Active

Active Imagination, or Genius.

Passive Imagination, or Taste.

Sources of the pleasures of imagination analysed.

Relation of the imagination to the sciences and fine arts.

Intuition and Reasoning.

Intuition, — the power by which the mind perceives the immediate agreement or disagreement of its objects, and of their relations.

Reasoning, — the power by which the mind discovers the more distant connection of objects and relations, by introducing an intermediate object and relation.

Intuition, — the foundation of axioms ;

Reasoning, — of demonstrations.

Judgement.

Judgement.

The inferences of the mind produced immediately by intuition, or remotely by reasoning.

S E C T. III.

Consciousness.

Consciousness is the perception which the mind has of itself in all its operations.

Consciousness —

- of Identity.
- of Sensation.
- of Intelligence.
- of Moral Principles.

Do we retain our consciousness when apparently insensible?

CHAP. III.

Of the Will.

SECT. I.

Characters of this Faculty.

The Will is the faculty by which the mind chuses or rejects its objects.

The Will is positive or negative.

SECT.

S E C T. II.

Motives.

The causes which influence the Will are termed *Motives*.

The natural history of motives, comprehended under the following titles.

Propensities.

Tendencies which spring from the constitution of human nature.

Opinions.

Decisions founded on apparent probability, or traditional prejudices.

C 2

Inductions.

Inductions.

Accurate inferences of the understanding, after examining objects, and their relations in Nature.

Sentiments.

Habits of thinking, arising from the permanent effects produced by emotions, passions, and affections, upon the mind *.

S E C T. III.

Application of Motives.

The application of Motives to

* See chap. 5.

action

action has produced the hypotheses respecting Liberty and Necessity.

The general laws of the Will, deduced from the preceding classes of Motives.

The laws of the Will direct to the science of Moral Philosophy.

CHAP. IV.

Of the Moral Faculty.

SECT. I.

Objects of the Moral Faculty.

The objects of the faculty of

moral approbation and disapprobation, are the dispositions and actions of intelligent Beings.

These objects address both the feelings and the understanding.

S E C T. II.

Law of Morality.

The law of Morality consists in the practice of that conduct which the Moral Faculty approves.

The observation of the law of Morality constitutes the chief good or the happiness of mankind.

It applies to individuals, to citizens, and to nations.

The principle of moral approbation explained, as producing the
sciences

sciences of Ethics and Jurisprudence.

S E C T. III.

Theories.

The objects of Ancient and Modern Moralists have been different.

The Ancients were employed in shewing the foundations of Virtue, and in stating the great distinction of good and evil, happiness and misery :

The Moderns, in assigning the principles from which our approbation of Virtue, and the distinctions of good and evil, happiness and misery, proceed.

Comparative

Comparative estimate of these Theories.

CHAP. V.

Of the Emotions, Passions, and Affections.

SECT. I.

Nature of Emotions, Passions, and Affections.

Emotions are pleasant or painful feelings simply.

Passions arise from pleasant or painful feelings, and are accompanied with strong desire or aversion.

Affections

Affections are permanent feelings, in consequence of reflection on the real or imagined excellence of a passion, or its object.

S E C T. II.

Exciting causes of the Emotions and Passions.

The general classes of causes which excite the emotions and passions referred to the following titles.

The Animal Appetites.

The Senses.

The Imagination.

Sympathy.

Contemplation of Character.

S E C T.

S E C T. III.

Division of the Passions.

Direct, — Indirect.

Selfish, — Social.

Active, — Depressing.

S E C T. IV.

Division of the Affections.

Selfish.

Benevolent.

Mixed.

S E C T.

S E C T. V.

Language of the Passions.

The passions have natural and universal signs.

Modulations of the voice.

Gestures *, &c.

The expressions of the passions examined in the arts of sculpture, painting, theatrical expression, &c.

* See Logic, chap. 3. § 1.

CHAP. VI.

Reflex Senses.

Nature of Reflex Senses.

The reflex senses have fixed classes of objects.

They receive refinement and bias from the understanding.

This refinement constitutes the most perfect taste *.

The most distinguished of these senses are those of——

- Melody and Harmony.
- Beauty.
- Sublimity.
- Ridicule.

* See Metaphysics, chap. 3. § 2.

S E C T. I.

Melody and Harmony.

Melody distinguished from Harmony.

Influence of Taste in refining the pleasures —

— of Melody.

— of Harmony.

Characters of the sense of music. —

— of the Ancient Music.

— of the Modern Music.

D

S E C T.

S E C T. II.

Beauty.

Natural objects and arrangements.

Artificial objects and arrangements.

Sentiments.

Description.

S E C T. III.

Sublimity.

Natural objects and arrangements.

Depressing Passions.

Sentiments.

Description.

S E C T.

S E C T. IV.

Ridicule.

Ridicule from —

- Objects.
- Reasonings.
- Sentiments.
- Description.

C H A P. VII.

Theory of the Mind.

S E C T. I.

Nature of Theory.

A Theory is an application of
D 2 the

the laws of Nature, to explain particular phenomena.

S E C T. II.

Theory of the Human Mind.

The theory of the Human Mind is deducible from the general qualities which have occasioned the preceding classes of its perceptions.

Theory —

- of the sources of Knowledge: Sensation, Understanding, Consciousness.
- of the Will.
- of the Moral Faculty.
- of the Emotions, Passions, and Affections.
- of the Reflex Senses.

The

The union of these particular theories forms the general theory of the human mind.

II.

LOGIC.

INTRODUCTION.

I.

Nature and progress of the Science.

The Logic of Art consisted in artificial classification, and in reasoning by fixed forms of argument.

The means it employed were categories and syllogisms.

The Logic of Nature is the science

ence of observing and applying the laws of Nature.

The means employed in this science are Analysis and Induction.

Definitions of the——

- Ancients.
- Schools.
- Moderns.

2.

Arrangement.

Logic comprehends the following articles.

1. Synthesis, and the Theory of Syllogism.
2. Analysis, and the Theory of Induction.
3. Principles

44 FIRST PRINCIPLES Part I. 2.

3. Principles of Natural Logic,
deduced by Analysis and
Induction from Language.
4. Rules of Philosophy.
5. Sophistry.

CHAP. I.

Of Synthesis, and the Theory of
Syllogism.

SECT. I.

Synthesis.

The method of Synthesis is the
method of Art.

It proceeds from general prin-
ciples to particular cases.

The

The uses of General Principles
in the different sciences explained.

Artificial and assumed General
Principles produced the ancient
Syllogistic Art.

S E C T II.

Syllogistic Art.

The transition from partial ab-
stractions to general propositions,
and the adopting of these propo-
sitions as first principles, com-
mon to all early and imperfect in-
quirers.

Peripatetic Philosophy.

School Philosophy.

Both were Art without Science,
and

and to be considered as venerable monuments of Ancient Genius.

They produced the Categories and Syllogisms.

The Categories were artificial titles under which Aristotle ranged all knowledge.

Syllogisms were artificial forms of argument deducible from a few first principles.

Mechanism of Logical propositions.

Mechanism of the figures and modes of Syllogism.

Regular Syllogisms.

Irregular Syllogisms.

SECT.

S E C T. III.

Abuses and Uses of the Syllogistic Art.

The Syllogistic forms were substituted in place of the observation of Nature.

Historical account of the causes which have exploded the use of the Syllogistic Art in the different sciences.

Uses of the Syllogistic Art, in teaching, and in business, explained.

CHAP.

CHAP. II.

Of Analysis, and the Theory of
Induction.

SECT. I.

*Nature and Origin of Analysis and
Induction.*

The method of Analysis is the
method of Nature.

It proceeds from the observation
of particular phenomena to the
discovery of the real arrangements
of Nature, and examines arrange-
ments by bringing back observa-
tion to particular phenomena.

Induction

Induction infers from the arrangements of Nature what are laws of Nature, and applies them as Theories to explain new phenomena.

The rise of Analysis and Induction, and their influence in improving the science of observing Nature, explained by the following circumstances:

Origin of Taste in Italy.

Progress of Mathematics and Natural Philosophy.

The *novum organum* of Lord Bacon *.

* See Part 2.

E

SECT.

S E C T. II.

Science of Analysis.

The science of Analysis consists
in discovering the arrangements
of Nature.

Composition —

— Individual,

— Species.

— Genus.

Decomposition —

— Genus.

— Species.

— Individual.

The

The specific characters of Analysis explained in —

- Mathematics.
- Natural Philosophy.
- Natural History.
- Ethics.
- the Fine Arts.

S E C T. III.

Science of Induction.

The science of Induction consists in discovering and applying the laws of Nature.

The phenomena which afford an Induction descriptive of a law of Nature, must be —

- Obvious.
- Uniform.
- Universal.

The means of ascertaining these characters of phenomena, are observation and experiment.

Description of the different species of experiments.

The subjects which admit of Induction are the whole sciences, and the useful arts, which they create.

Sir Isaac Newton's axioms of Natural Philosophy shewn to be universal axioms of Nature.

Comparative view of Analogy and Induction.

C H A P. III.

Principles of Natural Logic, deduced by Analyfis and Induction from Language.

S E C T. I.

Origin and Fabric of Language.

Language denotes the whole means by which mankind express their thoughts :——

— Natural.

— Artificial.

Natural language has fixed classes of signs :——

— Modification of Features.

— Gestures.

— Modulations of the Voice.

The arts employed by Language furnish the following classes.

Words.

Mute Signs.

Written Characters.

The science of Grammar, which analyses these arts, treats of the parts of Speech, and of their application.

S E C T. II.

Science of Logic and Language.

Logic is the science of observing Nature.

Language furnishes signs for every step in this observation.

Logic and Language have the connection

connection of thought, and the expressions of thinking.

They are subjects of analysis in their ——

— Composition.

— Decomposition.

Subjects of induction, by furnishing phenomena, which are ——

— Obvious.

— Uniform.

— Universal.

The branches of Natural Logic, viz. Analysis, Induction, and General Arrangement, have their corresponding signs in the science of Grammar.

S E C T. III.

Theory of Analysis.

Philosophical Analysis comprehends

tends the progress of the Human Mind in observing and classing objects, by their nature and obvious qualities.

The parts of Language exhibiting signs for this progress, belong to the classes of substantives and adjectives.

By Induction.

From Proper Nouns and Pronouns,——

—Individual objects.

From Common Nouns,——

—Particular Classes, or Species.

From Adjectives,——

—Qualities of Objects, and of Classes.

From Abstract Nouns,——

—General Classes, or Genera.

SECT.

S E C T. IV.

Theory of Induction.

Philosophical Induction explains the operations of the Understanding, in deciding on the laws of Nature in individuals, and classes of objects.

Substantives, adjectives, verbs, and adverbs, furnish signs for the subjects of judgement, and for the various methods of judging.

By Induction.

From Substantives and Adjectives, —

— The two first terms of Propositions.

From

From the Modes and Tenses of Verbs, ——

— The third term of Propositions.

From Adverbs, ——

— The modification of the third term of Propositions.

S E C T. V.

Theory of General Arrangements.

General Arrangements comprehend the method by which the known relations betwixt objects, and classes of phenomena, may be extended, in order to discover phenomena and laws of Nature which are universal.

Prepositions

Prepositions and conjunctions furnish signs for continuing the relations betwixt names and propositions, in order to form a demonstration or a description.

By Induction.

From Prepositions,——

— The relations betwixt the parts of the same affirmation.

From Conjunctions,——

— The relations betwixt different affirmations.

The principles of Natural Logic, deduced by these theories from syntax, as established by universal grammar.

SECT.

S E C T. VI.

*Relation of Natural Logic to the o-
ther Sciences.*

The analysis and induction which have improved the sciences of Natural History and Philosophy, are similar to the analysis and induction of Language and Logic.

The sciences to which this method has not been applied, still remain defective *.

* See Part 2.

CHAP. IV.

Rules of Philosophy.

The useful rules for philosophizing, or attaining the knowledge of the laws of Nature, are, the laws of the science of Natural Logic, directed to the acquisition of the sciences, and to the practice of the arts.

Rules for philosophical observation and analysis.

Rules for philosophical arrangements.

Rules for philosophical induction.

Rules for philosophical theories.

CHAP. V.

Of Sophistry.

SECT. I.

Nature and Progress of Sophistry.

Sophistry is the application of the method of science, and of argument, to establish what is uncertain or false.

Ancient Sophists.

Modern Sophists,

SECT.

S E C T. II.

Sophistry in Science.

Sophistry in Science referred to the following classes of causes.

Obscure perceptions.

Incomplete Analysis.

Artificial Arrangements.

False Inductions.

Hypothetical Theories.

S E C T. III.

Sophistry in Argument.

Sophistry in Argument, or Reasoning, referred to the inaccuracies and ambiguities of Language.

F 2

Artificial

Artificial Logic furnishes names for the different species of Sophistry in Argument : —

- Ignorantia Elenchi,
- Petitio Principii,
- Non causa pro causa,
- Fallacia divisionis,
- &c.

The science of observing Nature applied as the proper means of preventing and correcting Sophistry in Science, and in Argument.

III.

METAPHYSICS.

INTRODUCTION.

I.

Nature and progress of the science.

The science of Metaphysics explains the foundations of the other Sciences and Arts.

The Sciences and Arts are created by the discovery of general facts in Nature.

Ancient Metaphysics, or the science of Universals,——

—Distinct from Physics and Mathematics.

—Neglected the observation of real phenomena.

—Exhibited a collection of abstract conceptions regarding Nature, and the principles by which it was supposed to act.

Metaphysics in the middle ages equally abstruse and removed from the observation of Nature.

Modern Metaphysics have less assumed the spirit of science than of party.

2.

Arrangement.

The science of Metaphysics comprehends the following articles.

1. Ontology.
2. The Science of Evidence.
3. The Art of Criticism.

CHAP.

CHAP. I.

Of Ontology.

SECT. I.

Nature of Ontology.

The sciences are all directed to real phenomena, or existences in Nature.

Ontology explains the most general conceptions which the Human Mind forms respecting these phenomena.

SECT.

S E C T. II.

Of Substance.

The Substances which we perceive in Nature are Body and Mind.

The human faculties can discover nothing of the essences of Substance, but collect general facts from the observation of particular objects.

The idea of Substance is suggested by an assemblage of real qualities.

These qualities are termed *Attributes*.

Substance——

—Material.

—Immàterial.

S E C .

S E C T. III.

Space.

Space signifies simple extension,
unconnected with Substance.

Space is ——

—immoveable.

—indivisible.

—unbounded.

S E C T. IV.

Duration.

Duration is suggested to the
Human Mind by the succession of
perceptions, whether of sensation
or reflection.

Duration

Duration is measured by the relation which it admits of with extension.

Measures of Duration : —

— Astronomical.

— Civil.

S E C T. V.

Quantity.

Quantity signifies what is susceptible of increase, diminution, and measure.

Quantity is the only object of science which admits of a perfect measure; and it can be measured only by itself.

Quantity measured, —

— Geometry.

Quantity

Quantity numbered,——

—Arithmetic.

Quantity simply is the object of
Pure Mathematics.

Quantity applied as the mea-
sure of material phenomena, is
the object of Mixed Mathematics.

S E C T. VI.

Power.

Causes and Effects.——

—Physical, appear in the fix-
ed order of Nature.

—Moral, in intelligent na-
tures.

—Final, in intention and de-
sign.

S E C T.

S E C T. VII.

Of Deity.

All observation of Nature terminates in the discovery of the the attributes of a First Cause, or a Deity.

Physical attributes : —

— Power.

— Unity.

— Intelligence.

Moral attributes : —

— Justice.

— Goodness.

S E C T. VIII.

The Human Soul.

The Human Soul possesses qua-
G lities

lities distinct from, and apparently opposite to, all the known qualities of Body.

From the nature of the qualities of the Soul we infer its immateriality.

From the nature of these qualities, and from the moral attributes of the Deity, we infer its immortality.

Review —

— of theories on these subjects.

— of the facts in Nature.

S E C T. IX.

Instincts of the Brutes.

Comparative view of the faculties

ties of man, and of other animals : ——

- Sensation.
- Intellect.
- Active principles.

CHAP. II.

Science of Evidence.

SECT. I.

Nature of Evidence.

The means by which Truth is established, are termed *Evidence*.

Truth signifies the perception of the Human Mind, respecting the

G 2 reality

reality of its objects, and of their relations.

The science of Evidence consists in an analysis of the different means which establish Truth.

S E C T. II.

Kinds of Evidence.

Evidence descends from absolute to probable.

Evidence —

— of Consciousness and Intuition.

— of Sensation.

— of Cause and Effect, comprehending Testimony, &c.

S E C T.

S E C T. III.

Kinds of Truth.

Different degrees of certainty are established by the application of Evidence : ——

—Intuition and Perception: ——

— Personal Identity.

— Intellectual Powers.

— Axioms.

— Material Objects.

— Demonstration, ——

— in Metaphysics.

— in Mathematics.

— in Physics.

— in Ethics.

—Proof approaching to Demonstration :——

—Facts.

—Events.

—Probability :——

—Partial knowledge of effects and causes in Nature.

—Calculation of chances.

—Analogical reasonings.

The different sciences require different kinds of evidence, and afford corresponding degrees of certainty.

Analysis of the principles of evidence in Civil and Criminal Laws.

CHAP.

C H A P. III.

Art of Criticism.

S E C T. I.

Object and Origin of the Art.

The object of the Art of Criticism is to furnish rules for judging in the Fine Arts.

The productions of the Fine Arts of Antiquity afforded objects and descriptions which successfully addressed the human feelings and imagination.

The observations of critics on these objects and descriptions, have been considered as rules, and
the

the application of them termed
the Art of Criticism.

The Ancient rules were implicitly copied, until true Philosophy brought back the attention of mankind to the observation of Nature.

This art, like every other, must have its science to analyse and improve it.

The science consists in the observation and arrangement of the objects in Nature and Art which please.

These objects address the eye and the ear in the first instance, but derive their character and refinements from their effects on the passions and imagination.

The faculty which feels their effects has been termed *Taste.*

S E C T. II.

Of the Faculty of Taste.

Sensibility to the finer arrangements of Nature, and of Art, when directed by a cultivated understanding, gives rise to the most perfect Taste.

History of Systems, respecting the nature of this faculty.

Constituents —

— of a correct taste.

— of a delicate taste.

Taste considered in its relations to Genius.

The

The variety of Taste referred to different classes of causes: —

- Natural sensibility.
- National objects.
- Degrees of civility.
- Progress of science.

The operations of the faculty of Taste, and the sources of its pleasures, are explicable only by an analysis of the objects which excite and improve it.

S E C T. III.

General Objects of Taste.

The general objects of Taste are the Fine Arts: —

- Music.
- Poetry.
- Sculpture and Painting.
- Architecture.

The

The science of observing Nature, applied to analyse the constituents of Genius in the Fine Arts, and the circumstances which form a taste for their productions.

S E C T. IV.

Particular Object of Taste.

The particular object of Taste is Composition, or the *Belles Lettres*.

Composition consists in directing Language and Style to the proper description and communication of knowledge, and of feelings.

Grammar explains the scientific principles of the language of composition.

Rhetoric,

84 . FIRST PRINCIPLES Part I. 3.

Rhetoric, the principles of Style, under the influence of Taste.

In style the imagination and passions unite with the understanding in creating the figures of Language.

Analysis of the figures ——

——from the Imagination.

——from the Passions.

The variety of Language, from plain description to the picturesque, and animated use of figures, forms the different characters of Style.

S E C T. V.

Characters of Style.

Every subject has a style suited
to

to its nature, and application to the business of life.

The characters of Style are susceptible of analysis only by the nature of the subjects described.

Style —

—in the Sciences.

—in History.

—in Oratory.

—in Poetry.

S E C T. VI.

Uses of the science of Criticism.

The science of Criticism restores the rules for judging in the Fine Arts to a reliance on those arts.

The science of Criticism habi-

H

tuates

tuates the mind to accurate analysis and chaste composition.

The science of Criticism, by uniting observation and taste, gives to the Philosopher the pleasures of the Fine Arts, and to the Man of Taste, the accuracy of Philosophy.

FIRST

FIRST PRINCIPLES

OF

PHILOSOPHY.

PART II.

General Arrangement.

THE first principles of Philosophy apply to all the subjects of philosophical inquiry and knowledge.

These subjects are, Nature, and the History of Philosophy.

I.

APPLICATION of the First
Principles of Philosophy
to the Study of Nature.

INTRODUCTION.

I.

Object and progress of this science.

The object of applying the first principles of Philosophy to the study of Nature, is, to give a view of the proper and useful subjects of inquiry, with the method of obtaining

obtaining a knowledge of each particular branch.

From this introduction to the sciences every student may select the peculiar object of his genius and taste.

The arrangements and rules of the ancients not suited to these ends.

The arrangements were the productions of elegant imagination, not of observation of Nature.

The rules accommodated Nature to logic and system, not logic and system to Nature.

The schools copied the logic and systems, but not the elegant arts and taste, of the ancients.

Examples of successful discovery in Natural Philosophy, not only pointed out the science of ob-

serving Nature, but afforded the subjects to which that science can be directed.

The explanation of this science was first offered in the writings of Lord Bacon.

The numerous discoveries made since Lord Bacon wrote, furnish examples for attempting the application of it to the various aspects of Nature.

Lord Bacon's philosophy gave the rules which directed to the great modern discoveries.

The application of the science of observation to the study of Nature, must deduce its rules from the spirit of these discoveries.

2.

Arrangement.

1. Philosophical arrangements
of Lord Bacon.

2. Philosophical arrangement
for the study of Nature.

CHAP.

CHAP. I.

Philosophy of Lord Bacon.

Object and Arrangement of Lord Bacon's Philosophy.

The general object of Lord Bacon's philosophy, is to connect the reasoning powers of man with experiments for the improvement of Natural Knowledge.

It is divided into two great branches :

1. A *Prospectus* of the subjects of Human Knowledge *.

* Vid. De dignitate et augmentis Scientiarum.

2. The

2. The Art of Induction, or of
interpreting Nature *.

S E C T. I.

Prospectus of Human Knowledge.

Theory.

Man derives his knowledge from
the faculties of Memory, Imagi-
nation, and Reason: ———

— Memory,	—— History.
— Imagination,	—— Poetry.
— Reason,	—— Science.

* Vid. Novum organum Scientiarum.

Prospectus.

Prospectus.

History.

Natural. — Civil.

Natural : —

- Productions of Nature.
- Peculiarities of Nature.
- Arts.

Civil : —

- Ecclesiastical.
- Literary.
- Civil limited.

Poetry.

- Narrative.
- Dramatic.
- Allegorical.

Science.

Science.

Sacred Theology. — Philosophy.

Philosophy :

Divine, — Natural, — Human. |

Divine : —

— Natural Theology.

Natural : —

Speculative, Practical, Mathematical.

Speculative : —

— Physics.

— Metaphysics.

Practical : —

— Mechanics, &c.

Mathematics : —

— Pure.

— Mixed.

Human : —

Science continued.

Human : —

Body, — Mind.

Body : —

— Arts of Medicine, &c.

Mind : —

— Logic.

— Ethics.

Analysis of the merits and defects of the Theory and Prospectus.

S E C T. II.

Art of Induction, or of interpreting Nature.

The object of the art of Induction is to direct the human understanding

derstanding in discerning the Laws of Nature in the various articles of the *Prospectus*.

It may be divided into the Preparatory and Scientific branches.

The Preparatory branch describes, in the form of rules, the dispositions required for the study of Nature.

1. Rules for expelling the prejudices which have retarded the progress of the useful Sciences and Arts.

Prejudices —

- of the Species.
- of the Individual.
- from Language.
- from Systems.

2. Rules for distinguishing the true and false objects and methods of Philosophy.

The Scientific branch offers rules for making real discoveries in Nature, and for applying them to the business of life.

1. Rules for forming the History of Nature, by the application of the Senses simply, or assisted by Art.

2. Rules for arranging Phenomena into Tables, by the application of Memory, where the Interpreter is to reduce Laws of Nature to Practical Arts, and rise from Practical Arts to Laws of Nature.

3. Rules for reconciling theory and practice, by forming axioms from experiments, and new experiments from axioms, by the aid of Reasoning.

SECT.

S E C T. III.

Effects of Lord Bacon's Philosophy.

The effects of this new method of interpreting Nature appear in particular discoveries, and in the public Taste for the Sciences and Arts.

The effects on particular discoveries stated in the progress of Natural Philosophy and History.

The Sciences to which it has not been applied remain subjected to Hypothesis and System.

Mr D'Alembert's imitation of the *Prospectus* examined.

The effects on public Taste appear in the imitations of the plan

for establishing a society for the improvement of Natural Knowledge *.

- The New Atlantis was the model on which the Societies and Academies of Europe have been formed.

Though this new Philosophy has been successfully applied to particular Sciences and Arts, it has not been formed into an elementary Science for promoting the study of Nature.

* See New Atlantis.

CHAP. II.

Philosophical Arrangement for the
study of Nature.

Theory.

The progress of the Mind in
the acquisition of knowledge, af-
fords the following Theory for
the study of Nature.

When we observe phenomena,
and collect facts, we form a Hi-
story.

When we discover the nature
and relations of phenomena and
of facts, we acquire a Science.

When we apply the result of
1 3 Science,

Science, as rules of conduct, we
practise Arts.

Philosophy —

— of History.

— of the Sciences.

— of the Arts.

S E C T. I.

Philosophy of History.

The Philosophy of History consists in an application of the principles of Analysis, Arrangement, and Evidence, to the great departments of Nature,

This application will require,

1. A description of phenomena
and of facts.
2. An application of the principles

ciples of Analysis, Arrangement, and Evidence, which render each branch of the History of Nature the foundation of a Science.

The principal articles in the History of Nature will appear in the following Table.

History of Nature.

1. Intelligent Beings.
2. Matèrial Phenomena.

1. Intelligent Beings ::

Deity, — Man.

Deity : —

— Existence.

— Characters.

Man : —

— Natural History : —

— Body.

— Mind.

— Civil

History of Nature continued.

- Civil History : —
- Government.
- Civil Laws.
- Economy.
- Literary History : —
- Arts.
- Sciences.
- Ecclesiastical History : —
- Natural Religion.
- Positive Institutions.

2. Material Phenomena.

Particular : —

- Animals.
- Vegetables.
- Minerals.

General : —

- The Earth.
- The System of Nature.

SECT.

S E C T. II.

Philosophy of the Sciences.

The Philosophy of the Sciences consists in an explanation of the method by which we discover and apply the laws of Nature in each department.

This discovery requires,

1. A sketch of the Inductions which discover the laws of Nature in the leading sciences, and of the manner in which these laws apply as Theories.
2. A sketch of the manner in which the laws of the Sciences become the foundations of the Arts.

The Sciences arise from the History of Nature.

The

The Sciences extend and explain the History of Nature.

The principal Sciences, and their connection with the History of Nature, will appear in the following Table.

Sciences.

1. Intelligence.
2. Material Phenomena.

1. Intelligence.

Deity : —

— Ontology.

— Natural Theology.

Man : —

— General Logic : —

— Pneumatology.

— Analysis and Induction.

— Metaphysic.

— Pure Mathematics.

— General

Sciences continued.

—General Ethics :—

—Morals.

—Jurisprudence.

—Politics.

—Casuistry.

2. Material Phenomena.

Particular Physics :—

—Animals, —

—Anatomy ;

—Vegetables, —

—Botany ;

—Minerals, —

—Mineralogy ;

—Physiology.

—Chymistry.

—Mixed Mathematics :—

—Mechanics, }

—Hydrostatics, }

—Pneumatics, }

—Optics, }

—Physical Astronomy.

S E C T.

S E C T. III.

Philosophy of the Arts.

In the Sciences man is the interpreter of Nature.

In the Arts he makes use of the laws of the Sciences as instruments for the attainment of his ends.

The application of the laws of the Sciences to explain and improve the Arts, constitutes the philosophy of the Arts.

This application requires,

1. A general knowledge of the subjects of the Arts.
2. An analysis of the relation subsisting betwixt the particular Arts, and the Sciences

ences which explain and improve them.

Pleasure is the object of the Fine Arts; Utility, of the Liberal and Mechanical Arts.

In the Fine and Liberal Arts the philosopher is directed by principles.

In the Mechanical, the artisan implicitly follows rules in practice, and in the subdivisions of labour.

The principal Arts, and their reliance on their corresponding Sciences, will be explained by the following Table.

K

Arts.

Arts.

Fine : —

- Music.
- Poetry.
- Sculpture and Painting.
- Architecture.

Liberal : —

— General Logic : —

— Arts of —

- Analysis,
- Reasoning,
- Criticism,
- &c.

— General Ethics : —

— Arts —

- of Legislation.
- of Political Economy,
- of good conduct in life.

Particular

Arts continued.

Particular Physics.

Anatomy, }
 Botany, } : —
 Mineralogy, }
 Chymistry, }

— Arts of —

— Surgery,

— Pharmacy

— Medicine,

&c.

— Arts of —

— Gardening,

— Agriculture,

&c.

K 2

Mixed

Arts continued.

Mixed Mathematics.

Mechanics,
Hydrostatics,
Pneumatics,
Optics,

}

: —

— Arts —

— of Architecture: —

— Civil,

— Military,

— Naval,

&c.

— of the Optician,

— of Perspective,

— of Painting,

&c.

Mechanical.

Arts continued.

Mechanical.

The Arts, from Particular Physics, and Mixed Mathematics, are subdivided for the purposes of labour.

II.

HISTORY of Philosophy.

INTRODUCTION.

I.

Subjects of History.

History records the events and discoveries which have characterized mankind in different ages.

Civil History records the progress of Nations :

The History of Philosophy, the progress of Discovery.

The

The principal subjects of Civil History are Religion and Government.

The principal subjects of the History of Philosophy are the Arts and Sciences.

2.

Chronology of History.

The Chronology of Civil History is the arrangement of events affecting nations according to the periods in which they actually happened.

The Chronology of Philosophy is the arrangement of the Arts and Sciences according to the æras when they assumed new forms.

3.

Arrangement of the History of Philosophy.

1. Philosophy and Letters previous to the rise of the Grecian free States.

2. Philosophy and Letters from the rise of the Grecian free States to the fall of the Roman Republic.

3. Philosophy and Letters from the fall of the Roman Republic to the revival of Learning in Europe.

4. Philosophy and Letters from the revival of Learning to the present times.

5. Reciprocal

5. Reciprocal influence of Philosophy and Civilization in their progress and decline.

CHAP.

CHAP. I.

History of Philosophy and Letters
previous to the rise of the Gre-
cian Free States.

The articles of Civil History,
and of Philosophy, in this period,
form but one subject.

We may conjecture respecting
the state of both by explaining the
following Table.

1. Religion.

Theism.

Polytheism.

Mythology.

2. Government.

History, &c. continued.

2. Government.

Political Laws : —

- Aristocracy.
- Theocracy.
- Monarchy.
- Undefined Republics.

Civil Laws : —

- Usages, or Law of Opinion.
- Traditional and Written Precepts, considered as Municipal Laws.
- Leagues, considered as the Law of Nations.

3. Arts and Sciences.

Fine Arts : —

- Poetry and Music, making but one Art.
- Eastern.

History, &c. continued.

—Eastern.

—Greek.

—Lyric.

—Epic.

Useful and Mechanical Arts
without Science.

Sciences, and Liberal Arts :—

—Cosmogony.

—Conjectural Astronomy.

—Astrology.

—Geometry.

—Legislation in Greece, pro-
ducing a species of E-
thics.

—Rhapsody.

—Sophistry.

—Hieroglyphics.

—Written characters.

CHAP.

CHAP. II.

Philosophy and Letters from the rise of the Grecian Free States to the fall of the Roman Republic.

The Elegant Arts and Philosophy of the Greeks appear in this period.

A false Logic, and their political situation, prevented important discoveries in the useful Sciences.

The spirit of their religion and governments was blended with their prevailing hypotheses respecting Nature.

L

These

These observations will be explained by the following Table.

1. Religion.

Oracles and Divination.

Polytheism of the Vulgar.

Mythology.

Superstitious Theism of the Philosophers.

2. Governments.

Political Laws : —

— Monarchies.

— Republics.

Civil Laws : —

— Municipal Institutions.

— National Usages and
Leagues, considered as
the Law of Nations.

Arts

History continued.

3. Arts and Sciences.

Fine Arts : —

— Poetry : —

— Lyric,

— Epic,

— Dramatic,

&c.

— Music : —

— Eastern.

— Greek.

— Sculpture and Painting :

— Greek.

— Architecture : —

— Eastern.

— Greek.

Useful or Mechanical Arts improved by Science.

History continued.

Liberal Arts : —

- Rhetoric.
- Artificial Logic.
- Metaphysics.
- Geometry.
- Limited Arithmetic.
- Medicine with Systems.

Sciences : —

- Natural History limited,
but without systems.
- Physics and Astronomy
with systems.
- Ethics with systems.

4. Sects.

Italic school, and school of
Pythagoras : —

- Eleatics,
- Sceptics,
- Epicureans,
- & c.

Ionic

History continued.

Ionic school, and school of
Socrates : —

- Academics,
- Peripatetics,
- Stoics,
- &c.

C H A P. III.

Philosophy and Letters from the
fall of the Roman Republic to
the revival of Learning in Eu-
rope.

In this period the prevailing
sects mingled their hypotheses with
the doctrines of religion, and made
a superstitious Theology the prin-

L 3 cipal

cial end and object of their philosophy.

The spirit of the governments explains the causes which contributed to the fall of Ancient Arts and Wisdom.

The following Table will afford Titles for explaining these subjects.

1. Governments.

Political Laws : —

- Roman Despotism.
- Barbarian Establishments.
- Feudal System.
- Ecclesiastical Hierarchy.
- Commercial Governments.

Civil Laws : —

- Roman Jurisprudence.
- Feudal Laws.

— Canon

History continued.

- Canon Laws.
- Municipal Institutions.

2. Arts and Sciences.

Fine Arts : —

— Poetry : —

— Last Greek.

— Last Roman.

— First Italian.

— Music : —

— National.

— Artificial, or Italian.

— Sculpture and Painting : —

— Italian.

— Flemish.

— Architecture : —

— Gothic.

— Greek.

Useful or Mechanical Arts with
inferior degrees of Science.

Liberal

History continued.

Liberal Arts : ———

— School Logic : ———

— Metaphysic.

— Casuistry.

— Arabian Arithmetic.

— Greek Geometry.

— Arts of ———

— Engraving.

— Printing.

Sciences : ———

— Natural History : ———

— Arabian.

— Revived Greek.

— Physics and Astronomy, —

— Revived Greek.

— First Modern Discoveries.

— Ethics of the Sects.

4. Sects.

Druids.

Jewish Sects.

Platonics,

History continued.

Platonics, Syncretists, and
Ancient Eclectics.

First Schools, or Monastics
in Cathedrals.

Arabian Philosophers.

Revived Greek sects in I-
taly.

Second Schools, or Uni-
versities.

Second or Modern Eclec-
tics.

CHAP.

CHAP. IV.

Philosophy and Letters from the revival of Learning to the present Times.

In this period the proper subjects of Taste and Philosophy were perceived, and separated from those of Civil History.

The spirit, however, of the governments of the present European States, with the numerous objects which they offer to invention and industry, have operated in different degrees as causes of the present public Taste for the Arts and Sciences.

These

These observations will be illustrated by explaining the following Table.

1. Governments.

Political Laws : —

— Monarchies Simple and Mixed.

— Republics Mixed.

Civil Laws : —

— Municipal Institutions.

— Law of Nations.

2. Arts and Sciences.

Fine Arts : —

— Poetry : —

— Italian.

— French.

— British.

— Music : —

— National.

— Artificial,

History continued.

- Artificial, or Italian,
- Sculpture and Painting : —
- Italian.
- Flemish.
- French.
- British.
- Architecture : —
- Gothic.
- Greek.

Mechanical and Liberal Arts reduced to a dependence on the Sciences which create and improve them.

- Sciences : —
- Logic : —
- Analysis and Induction.
- Pure Mathematics : —
- Geometry.
- Arithmetic.
- Algebra.
- Natural

History continued.

Natural History : —

- Anatomy.
- Botany.
- Mineralogy.
- Chymistry.
- Medicine.

Phyics : —

- Mechanics.
- Hydrostatics.
- Pneumatics.
- Optics.
- Astronomy.
- Geography.
- Universal Gravity.

Ethics : —

- Moral Philosophy.
- Jurisprudence.
- Politics.

3. Sects.

Scholastics.

M

Cartesians,

History continued.

Cartesians, &c. of the seven-
teenth age.

Metaphysicians.

Moralists, &c. of the eigh-
teenth age.

CHAP. V.

Reciprocal influence of Philoso-
phy and Civilization in their
progress and decline.

Nations have a progress, from
rude institutions, to the govern-
ment of laws, and the refinement
of manners.

Philosophy furnishes the corre-
sponding articles of rude arts,
speculations,

speculations, useful discoveries, and a public Taste for the Arts and Sciences.

1. What have been the effects of the different kinds of Philosophy on the Human Mind ?

2. What have been the effects of Civil Institutions on Philosophy, and of Philosophy on Civil Institutions ?

3. What have been the reciprocal effects of both on the manners of mankind ?

T H E E N D.

